

REMARKS

In response to the May 31, 2006 Office Action, Applicants respond to the Examiner's detailed action with the following remarks numbered according to the Examiner's communication. Claims 1-19 are pending and rejected in the application. Claims 1, 3, and 18 are amended hereby and Claims 2, 16, and 17 are hereby cancelled without prejudice.

Claim Rejections – 35 U.S.C. §112

1-2. In response to the Examiner's rejection of Claims 2, 3, and 19 under 35 U.S.C. §112, second paragraph, Applicants have amended Claims 1 and 3. Claim 1 is amended in part to include the subject matter of Claim 2, which is cancelled without prejudice. Claims 1 and 3 are amended to positively claim a plurality of grooved oil channels. Applicants therefore submit that there is clear antecedent basis for the grooved oil channels as a plurality.

With regard to Claim 19, Applicants amended Claim 1 to include the limitation of a "means for controlling the flow of oil through the first and the second channels and the first and the second ports." The control means is described in the specification on page 17, lines 12-17 (or paragraph [0067] of the published application, document number US 2004/0191361 A1). No new matter is added. Applicants therefore submit that there is clear antecedent basis for the control means.

Claim Rejections – 35 U.S.C. §103

3-5. The subject matter of all the claims in the present application were commonly invented by all inventors.

6. Responsive to the Examiner's rejection of Claims 1-19 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,645,443 (Aoki) in view of Japanese Patent Document 4-216906 (Japan'906), Applicants respectfully traverse. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Applicants amended Claim 1 to include the subject matter of Claims 16 and 17 and thus requires the fastening element to include "a pair of half nuts arranged in the moving platen." The Examiner asserts that such a fastening element is conventional; however, the Examiner has not provided a reference that teaches a mold clamping apparatus with a fastening element having a pair of half nuts arranged in the moving platen. Nor has the Examiner cited a reference work recognized as standard in the art to support the assertion. Applicants submit that the assertion that such a fastening element is conventional is not capable of instant and unquestionable demonstration as being well known. MPEP 2144.03.

The fastening element taught by Aoki is threaded, requiring a complex mechanism to fasten the ram to the moving platen. Aoki's fastening element includes a worm gear that meshes with and rotates a geared connecting tube. The connecting tube rotates an internally threaded chuck to thread the chuck onto the end of the ram. A fastening member is also required to clamp down on the chuck and force it against the ram. In contrast the fastening element of the amended Claim 1 simply includes a pair of half nuts with coupling grooves for engaging coupling projections on the ram. Aoki and Japan'906 thus do not teach or suggest the fastening element of Claim 1. Applicants respectfully submit that Claim 1 and the claims that depend therefrom are therefore allowable over the references.

Similarly, Claim 18, amended to be in independent form incorporating the subject matter of Claims 1, 2, and 16, is directed to a simple adjustable fastening element as contrasted with the complex fastening element taught by Aoki. The fastening element of Claim 18 includes a rotatable section arranged in the moving platen and having radial coupling grooves. The ram, having coupling projections is inserted through a hole in the rotatable section with the coupling projections passing through the radial grooves. The rotatable section is rotated to an angle sufficient to capture the coupling projections. Aoki and Japan'906 thus do not teach or suggest the fastening element of Claim 18 and the Examiner has not provided a reference that suggests that it would be obvious to combine such a fastening element with Aoki and Japan'906. Nor has the Examiner cited a reference work recognized as standard in the art to support the assertion. Applicants submit that the assertion that such a fastening element is conventional is not capable of

instant and unquestionable demonstration as being well known. MPEP 2144.03.

Applicants respectfully submit that Claim 18 is therefore allowable over the references.

Claim 8 is further distinguishable from the combination of Aoki and Japan'906. Neither Aoki nor Japan'906 teaches or suggests a ram having a central ram portion that engages the clamping cylinder and a front ram portion and a rear ram portion having the same outside diameter.

Claim 10 is also further distinguishable from the combination of Aoki and Japan'906. Claim 10 requires that the central ram portion has a tapered portion adjacent the front ram portion and that the distance from one end of the close contact portion to the second port is smaller than the width of the tapered portion. In other words, the distance F2 is smaller than the distance F1 in Fig. 6, as best described on page 26, lines 16-25 (or paragraph [0093] of the U.S. published application, document number US 2004/0191361). This allows the central ram portion to move to the end of the close contact portion, and it is possible to increase the stroke length of the clamping ram while maintaining the small size of the mold clamping cylinder. Neither Aoki nor Japan'906 teaches or suggests this relationship.

Applicants further respectfully disagree with the rejection of Claim 11. Neither Aoki nor Japan'906 teaches a **discal** front sealing portion

7. The remaining art of record has been considered and does not render obvious the invention as now claimed whether viewed singly or in combination.

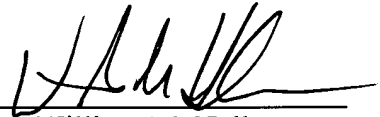
8. Applicants appreciate the opportunity to call the Examiner but believe that this amendment to the claims and the forgoing remarks fully address the issues raised by the Examiner. On the other hand, the Examiner is invited to call the undersigned practitioner if he has any matters to address that will facilitate allowance of the application.

In the event that Applicants have overlooked the need for an extension of time, additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefore and authorize that any charges be made to Deposit Account No.: 50-3010.

Applicants respectfully request favorable consideration and the timely issuance of a Notice of Allowance in this case.

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